National Weather Service

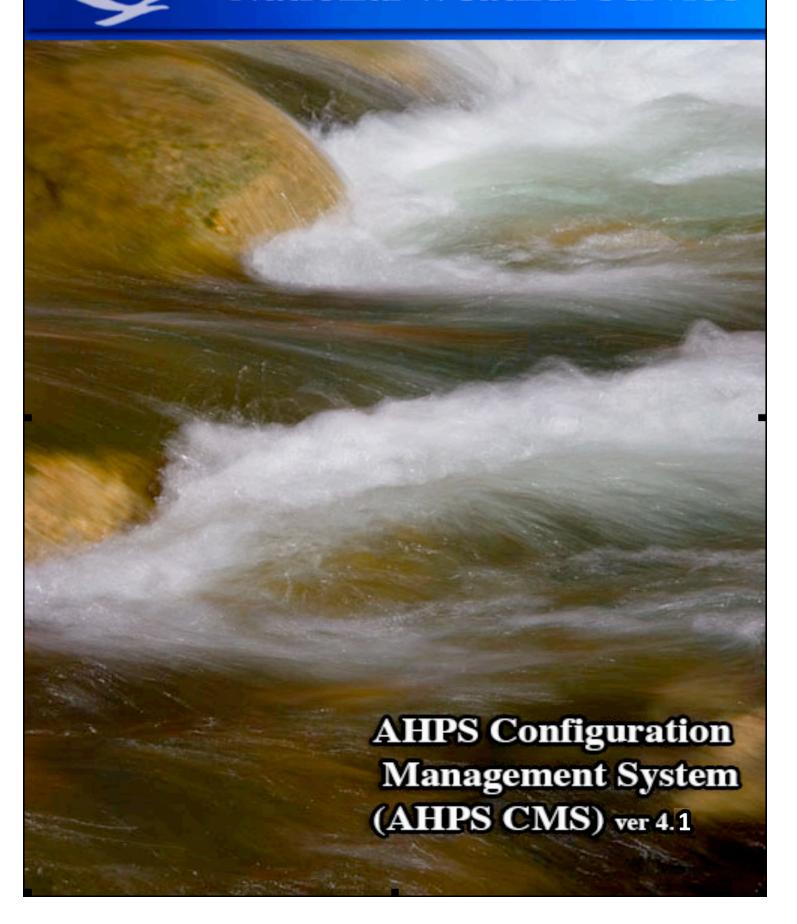


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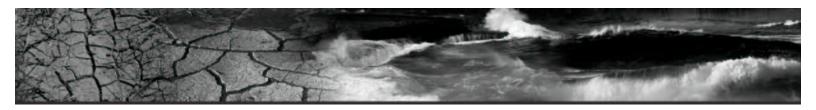
Background

The AHPS Configuration Management System (AHPS CMS) is a web based interface designed to manage a National AHPS Web configuration database. This release of the AHPS CMS Version 4.0 will provide users with more control over the configurable items on WFO AHPS Web pages. This new interface/database provides users with the following advantages:

- Integration of the NRLDB Values into the AHPS CMS interface
- Ability to configure PEDTS Data fail-over for HydroGen
- Elimination of Tiger Maps and Introduction of Google Mapping Interface
- Provide the ability to suppress plotting of observation and forecast data
- Selectable Hydrograph "Flow Units"

Moving the AHPS web configuration data to a completely database driven environment opens up a variety of possibilities for future AHPS web page enhancements such as the following.

With the release of the NWS CMS, a modular experience has been created. Instead of utilizing "hard-coded" fixed button navigation, users can transition seamlessly throughout the AHPS CMS and NWS CMS (access permitting) by usage of a tabular and dropdown navigation that coincides with the Web presence that is currently implemented on the NWS homepage www.weather.gov. This allows NWS CMS and AHPS CMS to achieve an overall better NWS standard "look and feel". Following the sections on browser requirements and access information below are instructions on how to use the navigational features as well as graphical representations of what users can expect to encounter when they login to the AHPS CMS.



Web Browser Requirements

This document assumes that end users will either be using Internet Explorer 6.0, Mozilla Firefox 3.0, Netscape Navigator 7.0 or newer browsers.

Data/Password Security

All web browser connections to the AHPS CMS are encrypted via the standard Secure Sockets Layer (SSL) protocol. Mozilla Firefox, Netscape Navigator and Internet Explorer all support SSL, and by convention, URLs that require an SSL connection start with https:// instead of http://. The AHPS CMS does not store any passwords and makes a secure SSL connection to a national LDAP server to authenticate users when logging in.

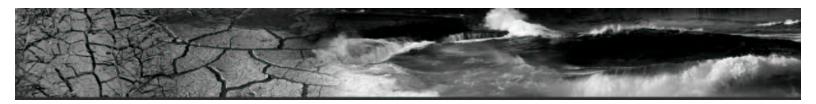
Support Contact Information

If you happen to encounter any issues with AHPS, please report them through the NWS Telecommunications Operations Center (TOC) trouble ticket system. The email address is:

TOC.NWSTG@noaa.gov

AHPS 24/7 Support Contact Phone:

NWS Telecomunications Operations Center (TOC) (301) 713-0902



User Accounts/Access

User accounts can be configured to allow access to configuration data for an individual WFO HSA, groups of HSAs, NWS Regions, and/or national access. Current user account configuration is based on information provided by the NWS Regions and can be modified as needed upon request. Please contact your Region to request any user or account changes.

Once an account has been configured for a user, they will receive email from **nws.cms@noaa.gov.** This email contains information on how and where to log into the AHPS CMS. An example is provided below:

Example email:

From: NWS CMS <nws.cms@noaa.gov>

Date: Wednesday, February 1, 2010 10:48 am

To: john.doe@noaa.gov
Subject: New NWS CMS Account

You have been given access to the NWS Configuration Management System (NWS CMS) interface. Your password is the same as your normal NOAA password and will change whenever you change your NOAA password.

You have been given access to the following CMS(s)

AHPS CMS

The URL for NWS CMS interface is: https://nwscms.weather.gov/

Your username is "john.doe@noaa.gov".

Support Information

The URL for AHPS CMS User Documentation is: https://nwscms.weather.gov/nwscms/pdf/AHPS_CMS.pdf

You can email TOC.NWSTG@noaa.gov with any questions or comments about the AHPS CMS interface or for immediate 24x7 NWS CMS support, please call:

(301) 713-0902.

Regards, The NWS CMS Admin Team



AHPS CMS URL

The AHPS CMS can be accessed at the following URL:

https://nwscms.weather.gov

Important note: The URL for the AHPS CMS interface may need to be changed in the future. If this becomes necessary, several weeks notice will be provided before any URL change is implemented.

Logging into the AHPS-CMS

*Important Note: All the following graphics show the interface in Microsoft Internet Explorer 6.0. The interface may look slightly different depending on the browser you are using.



Figure 1: AHPSCMS Login Page

To log into the AHPS CMS site shown in (*Figure 1*); use your full noaa.gov email address i.e. "john.doe@noaa.gov" and your email account password then click on Login. See (*Figure 2*).





Figure 2: NWS CMS Login Page with User Information

Once a user has successfully logged into the site, they will receive a notice to all users that this is an official government website and is for authorized use only. See (*Figure 3*). At this point users will need to either accept that they are logging into an official government system or logout.





Figure 3: Notice to Users Page

Using the New Interface

After clicking on Accept, the end user could see one or multiple NWS CMS Modules depending on the user's access configuration. (*Figure 4*) shows links for AHPS and NWS WFO. In order to access the AHPS CMS, users need to click AHPS. Users will then be directed to a page like the one seen in (*Figures 5 and 6*) which displays links for one or multiple WFOs. In either case, users will select the WFO they wish to view or make Web configuration changes to. Also if users have access to more than one WFO, they can easily sort the lists alphabetically by city or 3-letter WFO ID by clicking either City or Abbrev.

**Important Note: Throughout the rest of this document, WFO Caribou, ME (CAR) and the sensors located within their area of responsibility will be referenced unless otherwise noted. This is only to decrease the complexity of the documentation. All questions not covered by this documentation will be answered via email or phone, and any reoccurring questions will also be added to the FAQ/Help section of the AHPS CMS web site.

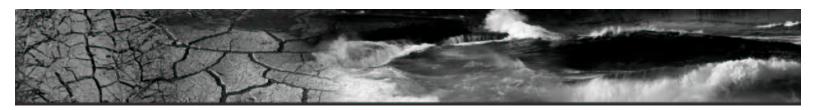




Figure 4: NWS CMS Module Selection Page

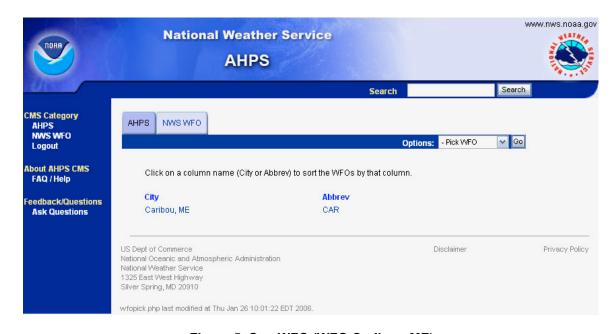


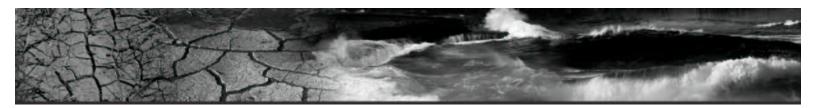
Figure 5: One WFO (WFO Caribou, ME)





Figure 6: Multiple WFOs

Once users arrive on this page they can observe the new tabular NWS CMS module navigation and the new "Options" dropdown selection box; (*Figures 7 and 8*) below highlight the new navigational items and briefly discuss how they are used.



Tabular NWS CMS Module Navigation



Figure 7: NWS CMS Tabular Module Navigation

Now that the NWS CMS has been built to provide a modular experience, users can simply mouse over the appropriate tab of the module they wish to edit and click; this action will redirect the users to the selected NWS CMS module. In (*Figure 7*) above, the user has access to two separate NWS CMS Modules, AHPS CMS and NWS WFO CMS. This user has the ability to configure items related to their WFO/HSA or make changes to one or more WFO's information depending upon their access configuration. NWS WFO CMS will be covered in the **Appendix** of this document.



"Options" Dropdown Selection Box

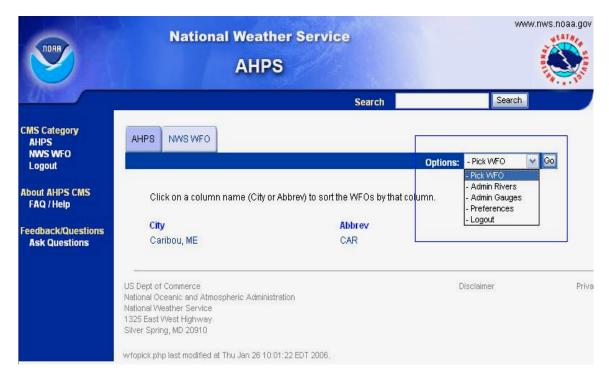
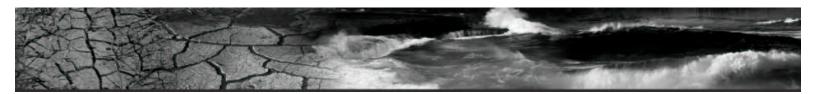


Figure 8: Intra-Module Navigation via "Options" Dropdown Selection Box

Once users have selected a module to configure, in this case AHPS CMS, they can choose to navigate within the options associated with that level of the module. In this case the user has not selected his/her WFO/HSA CAR so they only have the options that are associated with the AHPS CMS and themselves such as, Admin Rivers, Admin Gauges, Preferences and the WFO selection. However, once the WFO/HSA has been selected more options will appear in this dropdown selection area as the module has been provided with additional information. These will be items such as the Rivers, Gauges and WFO/HSA AHPS configuration items.



NWSLID Selection Page – Gauges Page

Once a user selects a WFO, in this case WFO CAR in (*Figure 5*), the NWSLIDs for gauges managed by the WFO are listed in alphabetical order by NWSLID. This list is also downloadable when using a browser other than Internet Explorer. See (*Figure 9*).

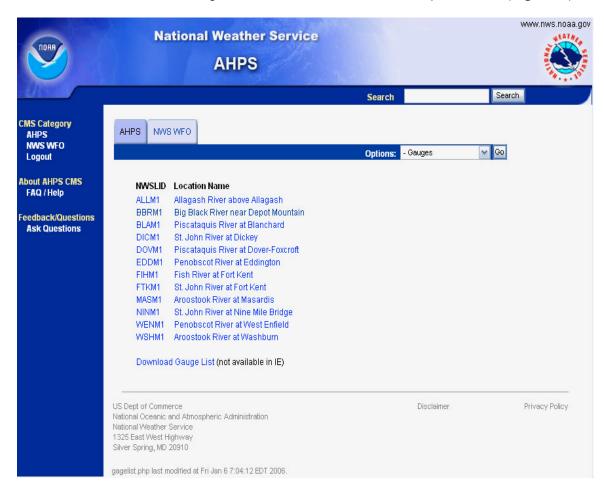


Figure 9: NWSLID Selection Page



Preferences Page

The Preferences Page (*Figure 10*) allows the user to control **Real-time**, **Daily Summary and Gauge Update** email notification settings. A Real-time email includes changes that are made throughout the day and are transmitted as changes are made. A Daily Summary email includes all AHPS CMS changes made for a 24-hour period and is transmitted once every 24 hours.

A gauge update email notification is an email/feature that sends out 2 types of email notifications:

Data Monitoring Email

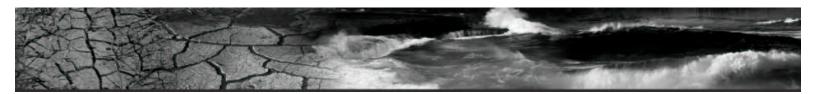
1.) The system will notify users that are associated with an HSA that has gauges that have not updated for more than 12 hours.

HSA Gauge Status Email - 12z

2.) Around 12z a process runs to check the status of all HSAs' gauges; this process sends out a gauge status email that notifies users if their HSA has gauges that are not updating. If all gauges are updating correctly users will not receive this email.



Figure 10: Preferences Page



Admin Rivers Page

The Admin Rivers Page (*Figure 11*) allows a user to add a new Creek, River, or Reservoir to the AHPS CMS database. ***Important Note*: Please use the "Browse By Name:" feature to verify that the water body is not in the database prior to trying to add a new water body. Additionally, this page allows the user to modify the spelling and delete water bodies from the database.

** Please use Delete, Update and New commands with Extreme Caution! Deletion Confirmation and Update Confirmation will be discussed on the following pages **



Figure 11: Admin - Rivers Page

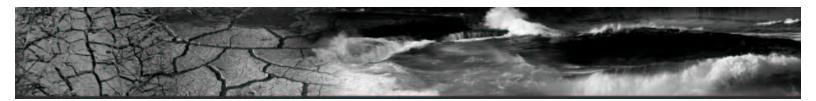


Deletion Confirmation

Once a user has decided to pelete an item in the AHPS CMS, a Deletion Confirmation Page will appear discussing the possible consequences of this action. This allows the user to confirm that what they are deleting will not adversely affect other WFOs as well as their own office. See (*Figure 12*).



Figure 12: Deletion Confirmation Page



Update Confirmation

Once a user has decided to update an item in the AHPS CMS, an Update Confirmation Page will appear discussing the possible consequences of this action. This allows the user to confirm that what they are changing will not adversely affect other WFOs as well as their own office. See (*Figure 13*).

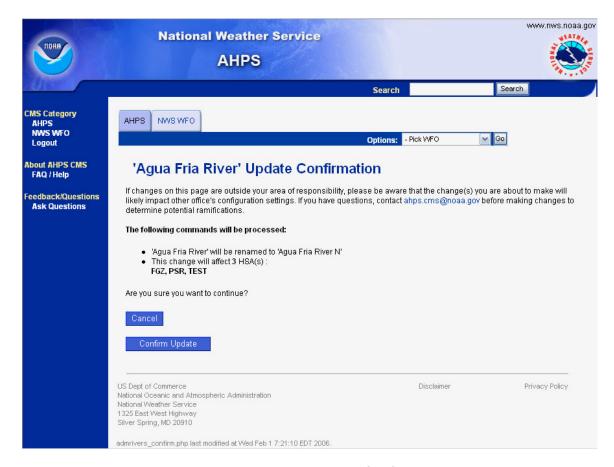


Figure 13: Update/Approval Confirmation Page



Admin Gauges Page

The Admin Gages Page (*Figure 14*) allows users to add/delete gauge(s) for a particular WFO. In the drop down box labeled **WFO**, users will select the WFO location they wish to add or delete gauges. If adding a new gauge, users must first enter the gauge NWSLID (SHEF) in the text box labeled **NWS LID** and click the button. See (*Figure 15*).

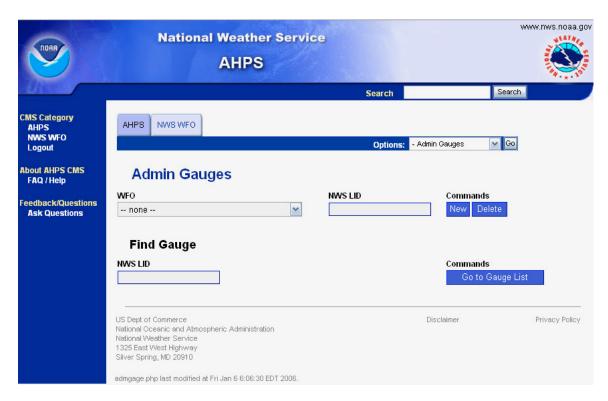
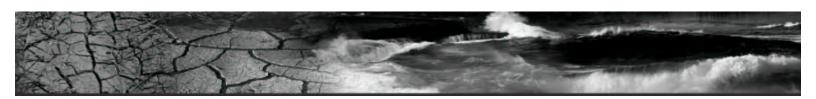


Figure 14: Admin – Gauges Page (Example 1)



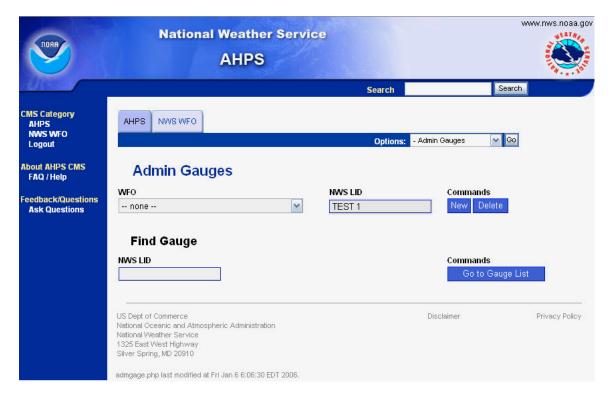


Figure 15: Admin – Gauges Page (Example 2)

Once the new gauge has been added it will take users to a new gauge configuration page for this location. See (*Figure 15*). A fully configured gauge data page is shown in (*Figures 17 and 18*). If editing an existing gauge, enter the NWSLID of the gauge in text box labeled **NWS LID** under the **Find Gauge** section of the Admin Gauges Page. Then click the Go to Gauge List button to bring up the desired gauge for editing. The ending result should look similar to (*Figures 17 and 18*).



Gauge Configuration Page

Once a user selects a WFO, in this case WFO (CAR) in (*Figure 5*), the NWSLIDs for gauges managed by the WFO are listed in alphabetical order by NWSLID. See (*Figure 16*).

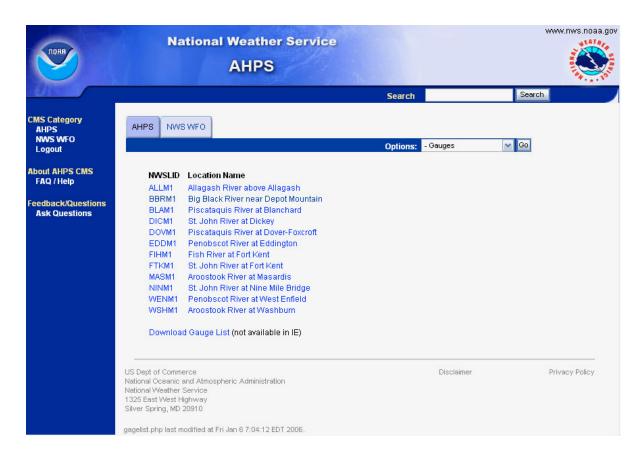
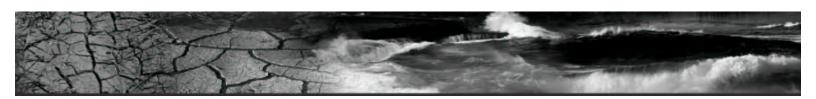


Figure 16: NWSLID Selection Page

Once a NWSLID is selected in (*Figure 16*), a gauge configuration page is displayed (*Figures 17 and 18*) which allows the user to input data or select configuration settings for the selected NWSLID.



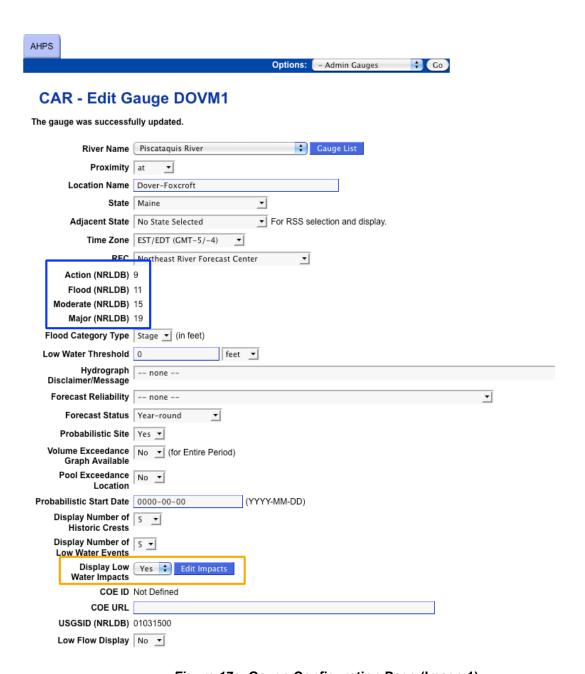
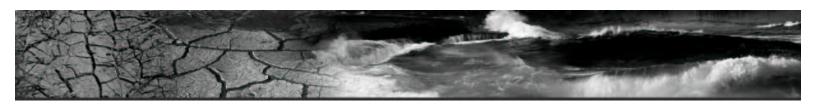


Figure 17a: Gauge Configuration Page (Image 1)

Users familiar to the interface may notice that Flood Category Values are no longer editable within the AHPS CMS interface. This information is populated from the NRLDB and if edits to these values are needed, they will need to be made within AWIPS. Also users have the ability to display and edit "Low Water Impacts"



COE ID	Not Defined	
COE URL		
USGSID (NRLDB)		
Low Flow Display	No 🔻	
	Enter text or HTML here that you wish to appear as "Additional Info	rmation":
Display Unique Additional Information		
Give Data Attribution	Yes ▼	
Attribution Wording	Observations Courtesty of US Geological Survey	
Attribution URL	http://water.usgs.gov/	
Attribution ALT Text	USGSWater Resources of the United States	(HydroGen Only
Monitor Gauge	Yes 🔻	
Edit HSA Plot	Update Down Streams Edit HydroGen Edit Datums	
FIPS Code MEC021	Command Update New	S Delete
NWS Forecast Z Zone Code MEZ010 Photo	Commanda Update New	S Delete

Photos with no caption specified will not display on the hydrograph page.

Figure 17b: Gauge Configuration Page (Image 2)

Many of the items shown in (*Figure 17a and 17b*) are self-explanatory and only the new or enhanced items on the gauge configuration page will be covered in detail at this time.

Highlighted on this page are the new configuration items that will be discussed in more detail. In orange on Figure 17a are the low water impacts (discussed later in detail); this menu links to a page where users can edit these impacts and order them as necessary. On 17b (seen above) there is also an orange menu button grouping that contains configuration items that are specific to the topic.



Gauge Map Configuration (Google Maps)

Gauge Map Configuration

Use the plus and minus controls to set the zoom level of the map then press the **Update** button to save your changes.

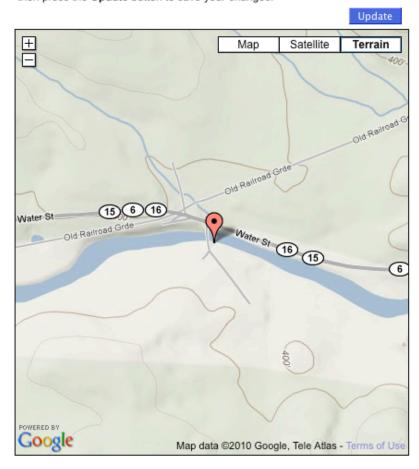


Figure 18: Gauge Configuration Page (Image 3)

In previous versions of AHPS Tiger Maps were utilized for Gauge Maps and had to be built and uploaded. With the new release of the AHPS CMS, users are provided with an adjustable zoom Google Maps interface for the gauge location. Users simply need to click the + / - signs and click update.



Low Water Impacts

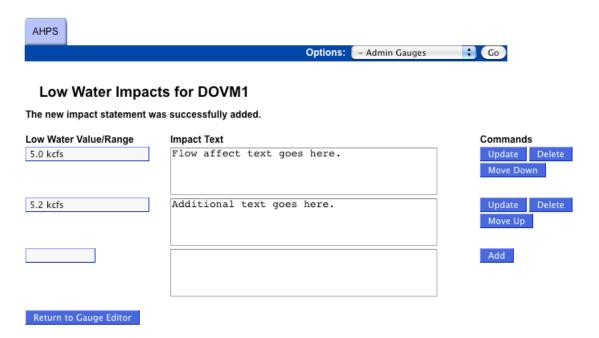


Figure 19: Low Water Impacts Edit Page

(Figure 19) Shows the Low Water Impacts edit page. When users select "Yes" to display

Low Water Impacts, and is clicked, they will be presented with a button

. Once users click this button, they will be directed to this page where they can add different Low Water Values and the Impact text that goes along with that value or range. The can be sorted manually via the buttons located to the right of the impact text box. Also these can be deleted and updated after the text has been edited on existing values. When users have completed their edits on this page they simply need to

click Return to Gauge Editor to return back to the Gauge Edit Page.



HSA Plotting Graphics

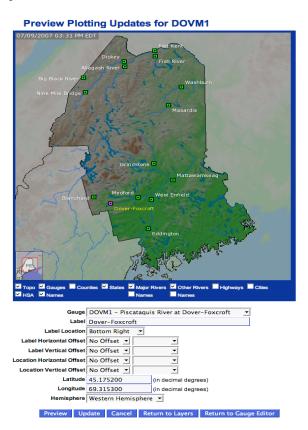
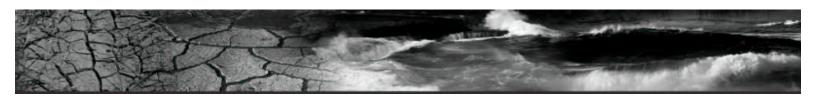


Figure 20: HSA Map Point Plotting Activation

(Figure 20) denotes plotting configuration information for the gauge on an HSA map. After all of the configuration information for the gauge has been entered into all fields; Preview click to view how the point will look plotted on the HSA map with the current configuration. On this page users can make changes to the latitude, longitude and the alignment of the point's map label. If the point being configured looks to be in its valid location and the Update name alignment is readable, click to apply the current settings. If further changes are needed, make the appropriate changes and click to view the Return to Gauge changes before applying them. When finished editing, click return back to the current gauge configuration page.



Data Attribution Feature

The AHPS CMS interface has been modified to allow NWS personnel to customize the "Observations Courtesy of" attribution organization wording, URL, and ALT tag text on the hydrograph page for both HydroGen and Rivdat type hydrographs. A new configuration item called "Give Data Attribution" has been added to the gauge configuration page with a default setting of "No". To ensure that current attribution to US Geological Survey (USGS) will not be lost once this new feature goes into production, any gauge with a USGS ID defined will have the new CMS fields populated with USGS attribution settings. The selection boxes that are used to change this can be seen below in (Figure 21a) in the Green rectangle.

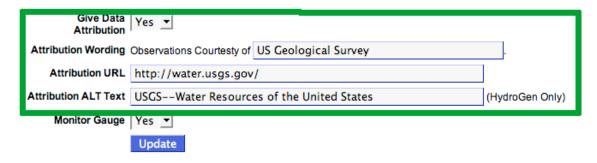


Figure 21a: Data Attribution Settings

^{*}This information will only be displayed when Yes Y is selected for the option:

[&]quot;Give Data Attribution". If No is selected for this option, this information will 'NOT' be displayed on this page.



Gauge Monitoring Feature

With the previous release of the AHPS CMS interface, a gauge monitoring system was implemented. This system monitors a WFO/HSA's gauge data to ensure that it is updating. This system is configured to send notifications to users within a WFO/HSA if they have their account configured to receive these notifications (See Preferences Page). Users can configure this option (Yes or No) on the Preferences Page, See (Figure 10). In association with the 12z data update notification/status email, this feature allows users to select whether or not a gauge should or should not show up in this notification email. This item is a dropdown selection box with a (Yes or No). Selecting "Yes" will allow the gauge to be included in the 12z notification; while selecting "No" will un-include the gauge in the notification. This feature is shown below highlighted in the Orange square:

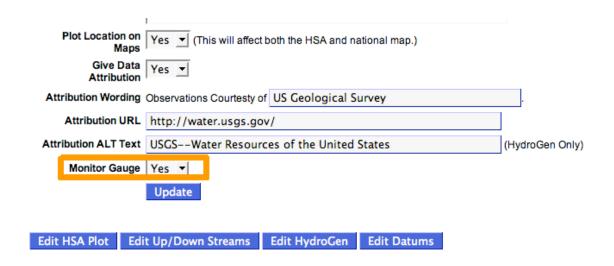


Figure 21b: Gauge Monitoring Feature



HydroGen (Gauge Configuration Page)

CAR - Edit HydroGen Data for DOVM1

Sensor In Service	Yes ▼
Override HydroGen Gauge Name	No ▼
HydroGen Days Ahead	3 days 🔻
HydroGen Days Back	3 days ▼
Show Flow Y-Axis	Yes 🔻
Flow Units	KCFS 🔻
Show Forecast Trace	Yes 🔻
Show Observed Trace	Yes 🔻
Use Computed Rating	Yes 🔻
Suppress Plotting of Observation Data	No _▼
Suppress Plotting of Forecast Data	No <u>•</u>
Maximum Forecast Age (Hours)	26
	Update
	Return to Gauge Editor
PEDTS Code	Add additional PEDTS Code Add PEDTS Code
	PEDTS Priority
	HGIRG 1
	When adding a new gauge or changing the type source or physical elen configuration to verify it is configured correctly for the PEDTS.

ment, please check your HydroGen

You can check HydroGen via Hydrobase setup menu, HydroGen Configuration. This GUI will show all of the stations that are currently defined. Go to the Location: box and edit the lid. Choose the Forecast Type Source and Type Source from the pull-down menus. Choose the Physical Element from the list, then click Save.

Additional Note: When adding a new location into Hydrobase, you must stop and then restart the SHEFdecoder.

Figure 22: XML HydroGen Configuration

HydroGen is suite of software programs that collect data from a database and prepare XML files and hydrograph graphics for the web. It was designed to replace rivdat. The items in (Figure 22) are used to configure this software suite. Some new configurable items (denoted in red) for HydroGen are the ability to select Flow Units (KCFS or CFS) The default unit is KCFS. Also users can suppress plotting of Observation and Forecast Data on the Hydrograph. Data Fail-Over will be discussed below.



The final item denoted in **red** above in (**Figure 22**) is PEDTS Data Failover. Users can select multiple PEDTS types (if available) and prioritize these in how it is used to display the data within the Hydrograph. HydroGen will continue to use a primary PEDTS until the pre-determined hours of the type is exceeded, it will then use the secondary source of information and continue to transverse the PEDTS list in a similar fashion.

Please Note When a user adds additional PEDTS, sometimes the failover process will take place during the period of time users are entering/configuring the PEDTS within the AHPS CMS. When adding additional PEDTS for failover operations, users should check back in 30 minutes to see if the "Reset PEDTS ..." button is displaying and click that button if it is displayed. This will complete the reset and allow the function to work properly. This only occurs during the setup of the PEDTS failover feature.

Also noted is that the NRLDB Data for a site is also displayed on the HydroGen Page

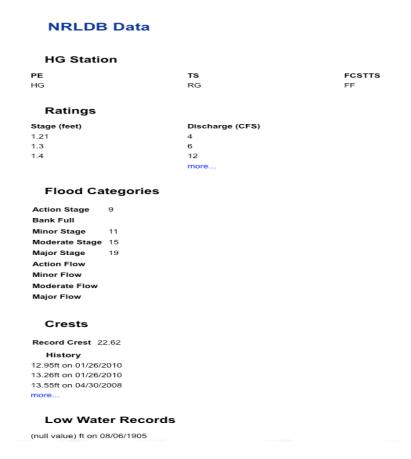


Figure 23: NRLDB information HydroGen Page



Gauge Photo Management

Photos for gauge sites will be uploaded and handled via special site hosted on Eastern Region's Intranet. A link will be provided within the AHPS CMS interface to connect to this site. Users can connect to the tool by clicking the link "click here" high lighted below in red. Once a location has photos uploaded, users can use this interface to edit the captions for the photographs and move them up or down in priority.

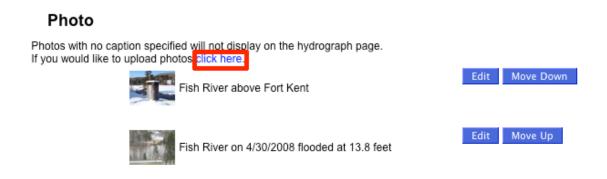


Figure 24a: Gauge Photo Management Interface Link



Figure 24b: Gauge Photo Editor Tool

Once photos for gauge sites have been uploaded via the ER hosted tool, users can edit the caption information by clicking the button located out to the right of the photo. Once on the page pictured above in *Figure 24b*, users can edit the photos caption or delete the photo outright. Once users have finished the needed updates to the caption the will need to click "Update" to complete the changes. See Appendix C for full documentation.



Edit Up/Down Stream

This page allows you to enter into the CMS the relationship a particular gauge has with other gauges around it. With this page you can set both a primary and a secondary gauge that is either up or down stream in relation to this gauge. This was implemented for cases of river forks where more than one gauge could potentially be considered up or down stream. If a gauge has either two up or down stream gauges a new fork arrow will be visible on the Hydrograph page.

CAR - Up/Downstream Locations for DOVM1

This page may take some time to load. Please be patient.

Primary Upstream Location

Primary Downstream Location

Secondary Upstream Location

None Specified

Secondary Downstream Location

None Specified

Update

Return to Gauge Editor

Figure 25: Edit Up/Down Stream Gauge Options



Edit Datums

You now have the ability in Phase V to input reference datums for each gauge. The Edit Datums page has the following options: Vertical Datum, Horizontal Datum, and Datum Note.

Vertical Datum - Toggle that can be either none, NAVD88 or NGVD29
Horizontal Datum - Toggle that can be either none or NAD83
Datum Note - Dropdown box with different notes to be displayed below the hydrograph.

There is also a table that allows you input the NWS stage as well as the vertical datum elevation information.

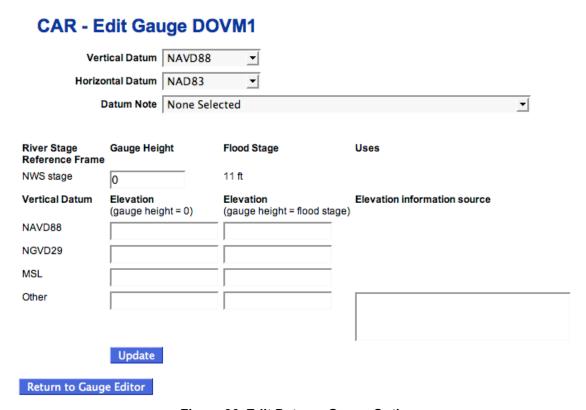
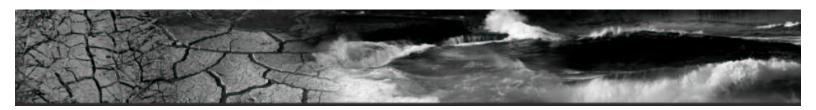


Figure 26: Edit Datums Gauge Options



Gauge Configuration Explanations

Configuration Item	Remarks	
River Name	The name of the water body the gauge should	
	be associated with.	
Proximity	Dropdown selection box. Selectable items are	
	above, at, below, near, and other.	
	Special feature (other): If the desired	
	proximity is a direction/distance (mileage) from a	
	fixed location, select "other" in the dropdown box	
	and then click on the Update hutton towards	
	and then click on the ——— button towards	
	the bottom of the page. This will bring up two additional items. One input box for an integer	
	value for distance and a dropdown box for	
	compass direction. Example for a gauge 10	
	miles North of the Location Name field:	
	other 💌 10 N Of 💌	
Location Name	Plain language name of the gauge location. This	
	is the name the user wants displayed on the	
	AHPS hydrograph page for this location.	
State	Dropdown selection box	
Adjacent State	Chose the Adjacent State for RSS Selection and	
	display	
Time Zone	Dropdown selection box	
RFC	Dropdown selection box	
Action	Stage in feet, volume flow, or enter zero (0) if undefined for gauge location (NRLDB Value)	
Flood	Stage in feet, volume flow, or enter zero (0) if	
1 1000	undefined for gauge location (NRLDB Value)	
Moderate	Stage in feet, volume flow, or enter zero (0) if	
	undefined for gauge location; this feature will be	
	used in the future on HSA maps to color code	
	the icon during moderate flooding. (NRLDB	
	Value)	
Major	Stage in feet, volume flow, or enter zero (0) if	
	undefined for gauge location; this feature will be used in the future on HSA maps to color code	
	the icon during major flooding. (NRLDB Value)	
Flood Category Type	Toggle between Flow and Stage types for the	
1 1000 Oategory Type	flood category.	
Low Water Threshold	Input the Upper Limit for Low Water	
Hydrograph Disclaimer/Message	Dropdown box selection. If a disclaimer/	
,	message is selected, it will displayed below the	
	hydrograph for the selected location. Options	
	are:	

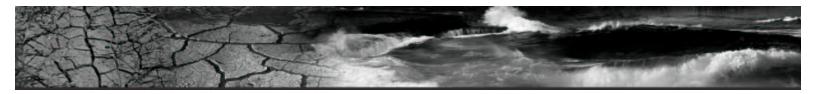
Configuration Item	Remarks	
_	1. No message (- none -)	
	2. Automated gauge readings are	
	unavailable, readings taken manually.	
	Automated gauge readings now	
	available, courtesy of USGS.	
	Flood stage level has recently changed.	
	Flow uncertain at levels above the	
	dashed line because there is no	
	established stage/discharge relationship	
	at those levels.	
	6. Gauge reading affected by nearby	
	construction.	
	7. Gauge reading affected by nearby debris jam.	
	Gauge reading affected by ocean tides.	
	9. Gauge reading affected by power generation	
	10. Gauge reading may be affected by ice.	
	11. Gauge reading may be affected by ice.	
	Forecast flows are unadjusted for ice.	
	12. Please report ice jams to local authorities.	
	13. Pictures of ice affected gauge available at bottom of this web page.	
	14. Gauge reading only in high-water situations.	
	15. Gauge readings inaccurate - awaiting repair.	
	16. Gauge reading affected by reservoir operations.	
	17. Gauge readings not routinely updated during non-flooding situations.	
	18. Gauge readings may be inaccurate	
	during periods of extreme cold.	
	19. Gauge readings not available during winter months.	
	20. Gauge reading is unreliable because gauge is under water.	
	21. Gauge readings received once daily	
	during low-water and more frequently	
	during high water. 22. This river gauge will be discontinued	
	soon and data will no longer be	
	available.	
	23. We are looking for a volunteer to monitor	
	this river gauge. If interested, contact the local NWS office.	
	24. NEW – Daily Forecasts now available for	
	this location.	
	25. Coastal Flood Impacts are dependent	
	upon waves as well as tide level. High	
	waves can result in flooding even if the	
	tide level is below flood stage.	

Configuration Item	Remarks	
Forecast Reliability	Dropdown box selection. If a forecast reliability message is selected, it is displayed below the hydrograph for the selected NWSLID gauge. Options are:	
	 No message (- none -) Reliability of the Forecast: Based on unobstructed flow Unavailable due to ice Unavailable due to missing or inaccurate readings Based on current and forecast river, weather and reservoir conditions 	

Forecast Status	 Dropdown selection box. Gives description of what type of forecast is available for gauge location. Item appears as a NOTE: below the hydrograph. The xxxx denote the name, water body type and proximity based upon the gauge's configuration in the AHPS CMS. 1. No routine – Graphical forecasts are not available for the xxxxxx xxxxxx. During times of high water, forecast crest information can be found in the text products. 2. Navigation Season - Forecasts for the xxxxx xxxxxx are issued routinely during the navigation season, and as needed at other times of the year. 3. Summer-only - Forecasts for the xxxxx River at xxxx are issued routinely during the warm season, and as needed at other times of the year. 4. Year-round - Forecasts for the xxxxx xxxxx are issued routinely year-round. 5. High Water - Forecasts for the xxxxx xxxxx are issued as needed during times of high water, but are not routinely available. 6. Data Point - Forecasts are not available for the xxxx xxxxx. Only observed stages are available for this point.
Probabilistic Site	Dropdown selection box (Yes/No); this feature turns on the probabilistic icons on the hydrograph page for the selected gauge.
Pool Exceedance Location* Volume Exceedance Graph	Dropdown selection box (Yes/No); *this features only displays when a site has been selected as a Probabilistic Site. When this item is set to "Yes", the location displays exceedance values as if it were a reservoir instead of a stream/river. Dropdown selection box (Yes/No); *this
Available*	features only displays when a site has been selected as a Probabilistic Site. This setting is used to add the volume exceedance icon to the hydrograph page for the entire period exceedance type. * If Volume Exceedance is set to "YES", then Probabilistic Site MUST be set to "YES". This probabilistic data type is not available for all locations. Contact your RFC if you question that your WFO uses this type of data.
Probabilistic Start Date (YYYY-MM-DD)	The expected start date of probabilistic data for selected location.
Display Number of Historic Crests	Number of historical crest to be displayed on hydrograph page.

Display Number of Low Water Events	Number of historical low water events to be displayed on hydrograph page.
Display Low Water Impacts	Toggle for the Display of Low Water Impacts
COE ID	Corps of Engineers (COE) gauge location ID.
COE URL	The COE URL for the selected gauge location.
USGSID	U.S. Geological Survey (USGS) gauge location ID; if this value is added, an attribution statement for the USGS will be displayed above the hydrograph.
Display Unique Hydrograph Data	Enter text or HTML here that you wish to appear as "Additional Information" below the impact statement on the hydrograph page. This item is configurable per gauge location.
Plot location on Maps	The feature is currently used to control whether or not the location is plotted on the HSA map and National AHPS map. If the feature is set to No the point will not be plotted and no other options will be available for this location. If the feature is set to Yes then the following options will be displayed in the Edit HSA Plot page: HSA Map Label, HSA Map Label Location, Latitude XXX, Longitude XXX, Hemisphere.
Give Data Attribution	Dropdown selection box, it is a Yes/No selectable item.
Attribution Wording	This field is used for the organization name(s) that attribution should be given to and is limited to 32 characters due to space constraints on the HydroGen hydrograph image. The AHPS code will pre-append the phase "Observations Courtesy of" prior to organization attribution wording input. This is a mandatory item if "Give Data Attribution" is set to
Attribution URL	This is the URL the attribution wording should point to. If a nonGov website is used, a jump page (You are now leaving the NWS) will automatically be configured for the nonGov website address. The "Attribution URL" is an optional item.
Attribution ALT Text (HydroGen Only)	This is an optional ALT tag text input field. If not defined, the AHPS code will use the wording from the "Attribution Wording" field for the ALT tag.
Monitor Gauge	Dropdown selection Yes or No . box that allows a gauge to be included or un-included in the 12z gauge update status email.

Once changes are made to configuration data, the user will need to click on for the section they have modified. This will save the modification to the configuration database.



Radar Links

With this release of the AHPS CMS you now have the ability to link to multiple radar sites. To do this you select Radar Links from the CMS Dropdown Menu. Once you have selected this option you will see a page similar to *Figure 25*. You can link to as many radar sites as you would like to, all you need to do is click the new button and a new form entry will appear that you can fill in with the new link's information. Once you have completed this you can see the new radar links on the left hand side of the AHPS page. (*Figure 2X*) You can also update or delete current information from this page.

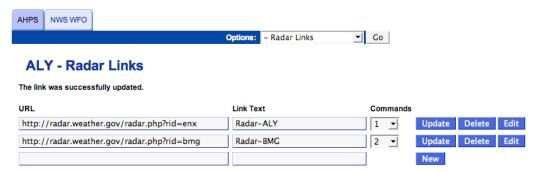
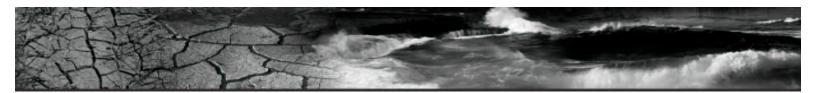


Figure 25 - Radar Links

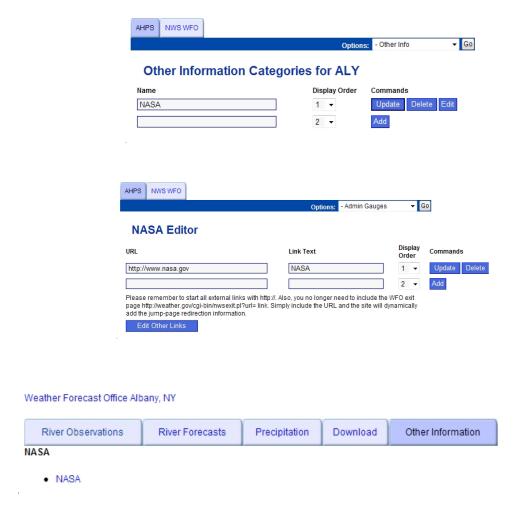


Figure 2X - Radar Links in Action



Other Information

You have the ability to input custom entries to the Other Information page. To do this you select Other Info from the CMS Dropdown menu. **Note in order for you information to be seen, the Display Other Information toggle needs to be set to Yes on the WFO configuration page. Once it loads you will be presented with a page similar to the one below. Here you can input the information, delete or update current information. You first create the category. You will see an Update, Delete, and Edit options next to the item. If you click on edit you will be taken to a page where you can input the links for this category. Once the information is added you can view it on the AHPS page by clicking on the Other Information tab.





Dropdown Webpage Navigation Page

The Dropdown Navigation Page (*Figure 27*) allows users to manage the name and order of the water body(s) listed in the dropdown list to the right of the HSA map and hydrographs AHPS web pages. Click on to associate a river(s) with the navigation name. If more than one water body is added under a navigation name, the dropdown box on the AHPS web page will automatically add the words (and Tributaries) to the navigation name. Water bodies can be consolidated into groups of water bodies under one navigation listing. This can help reduce the number of dropdown boxes to the right of the HSA map and hydrographs and improve the usability of AHPS HSA navigation. See (*Figure 28*).



Figure 27: Webpage Dropdown Navigation (water body association)



To see all current watches and warnings, click here.

Weather Forecast Office Albany, NY

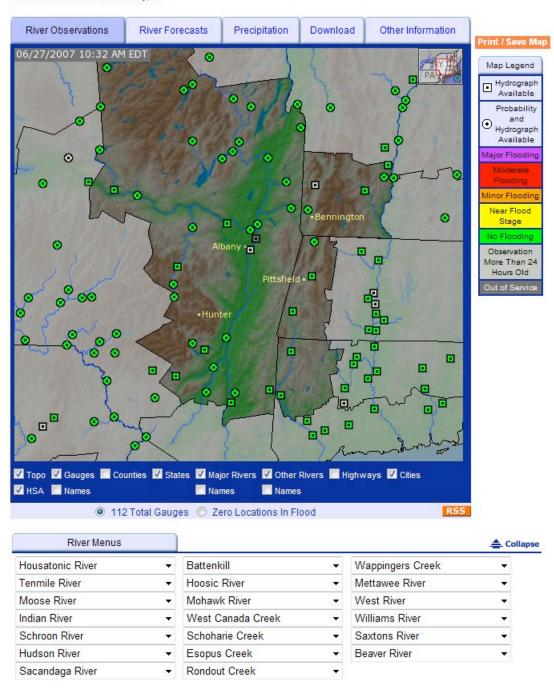
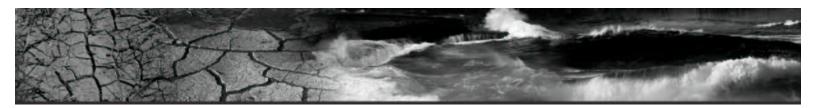


Figure 28: ALY AHPS HSA Page (River Menu Dropdown)



WFO (XXX) AHPS Specific Page

With the introduction of the new NWS CMS modular interface, the WFO page has undergone a minor redesign. With growing requirements, a new NWS CMS module, NWS WFO, has been created to handle general WFO webpage configuration items (**This item can be referenced in the Appendix**). These items include physical address, postal address, public phone numbers, etc...... To handle AHPS Specific WFO items such as AHPS Webmaster question email configuration and additional hydrologic resource links a more condensed version of the previous AHPS WFO page has been added to the AHPS CMS and can be accessed via the "Options" dropdown navigation box [**WFO** (**XXX**)]. A sample of this page can be seen below:

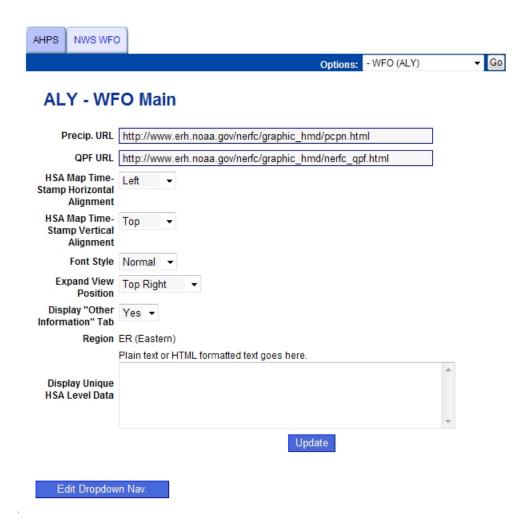


Figure 29: AHPS Specific WFO page (image 1)

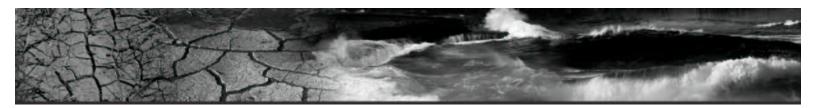


Link Text	URL			Sort	t Order	Command	I
Northeast River Forecast	http://www.erh.noaa.gov/nerfc/			1	•	Update	Delet
Snow Information	http://www.nohrsc.noaa.gov/			2	•	Update	Dele
						New	
Hydrological Res							
Link Text	URL			Sort	t Order	Command	ı
						New	
Ask Questions / W	(ebmaster Address(es)						
	ebmaster Address(es)	Addre	essing	Туре	c	Command	
		Addre To:	essing	Туре	c)elete
Email Address				Туре	c	Update [Delete Delete
Email Address ahps.webmaster@noaa.gov		To:	•	Туре		Update [
Email Address ahps.webmaster@noaa.gov		To:	•	Туре		Update [
Email Address ahps.webmaster@noaa.gov		To:	•	Туре		Update [
Email Address ahps.webmaster@noaa.gov Alywebmaster@noaa.gov Nonstandard Text		To:	•	Туре		Update [Update [New	

Figure 30: AHPS Specific WFO Page (image 2)

Configuration Item	Remarks
Precip. URL	This URL is linked to the Past Precipitation link under Hydrologic Resources on the HSA page.
QPF URL	This URL is linked to the Forecast Precipitation link under Hydrologic Resources on the HSA page.
HSA MAP Time-Stamp Horizontal Alignment	Horizontal legend alignment, left, right, center, custom: If custom was select for legend align, this is the number of pixels from the left boarder the legend will start.
HSA MAP Time-Stamp Vertical Alignment	Vertical legend alignment, top, bottom, custom. If custom was selected for legend valign, this is the number of pixels from the bottom that the legend will be.
Display "Other Information" Tab	This toggle is for the "Other Information" Tab on the WFO page

Configuration Item	Remarks
Expand View Position	Allows the placing of the Expand View button on the HSA map in different locations.
Region	NWS Region. Assigned during creation of the AHPS configuration of database.
Display Unique HSA Level Data	This input area is used for unique data will be displayed globally across all web pages for a HSA. Input can be in plain text or HTML formatted text. http://newweb.erh.noaa.gov/ahps2/index.php?wfo=gsp
Additional Resource Links	Additional resource links can be added via this input. Input requires the link text and URL. The new button was must be clicked after input has been entered. If a link text or URL has been modified, the update button should be used to save the data to the configuration database.
Hydrological Resource Links	Hydrological resource links can be added via this input. Input requires the link text and URL. The new button must be clicked after input has been entered. If a link text or URL has been modified, the update button should be used to save the data to the configuration database.
Ask Questions / Webmaster Address(es)	Email address(es) listed in this section will be linked to in the footer of AHPS web pages.
Non-Standard Text Products	This feature allows WFO(s) to add additional NWS products under the Text Product page link. This feature will allow nonstandard AHPS products to be added. Input for the field is the three letter identifier of the product.



FAQ/Help Page

The FAQ/Help page (*Figure 31*) will be used to answer frequently asked questions and provide additional support to users of this interface.

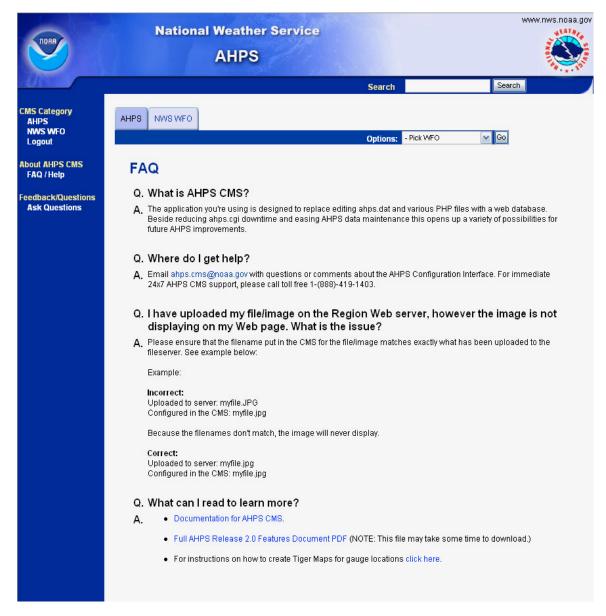


Figure 31: FAQ/Help Page

Appendix A - NWS WFO Module

WFO Configuration Module

When a user selects the module NWS WFO, they are directed to a page that will allow them to select either one or multiple WFOs depending upon their access configuration. Usually standard users will only have access to one WFO. Once a user selects a WFO, they are directed to a WFO Configuration Page, see (*Figures A-1 and A-2*)



Figure A-1: WFO Selection Page

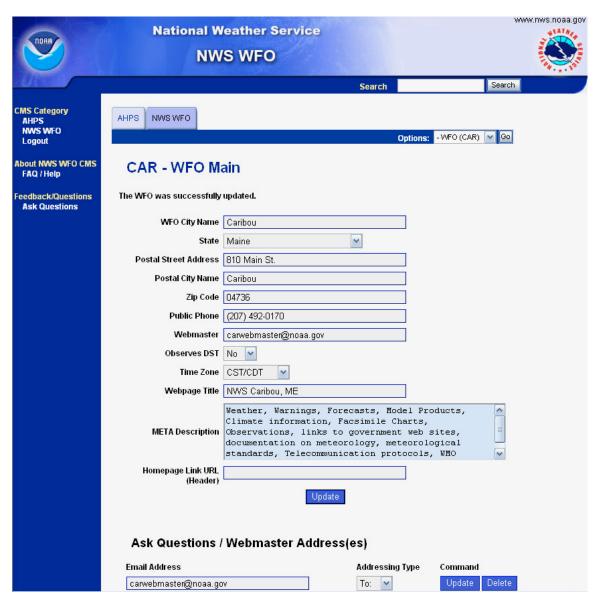


Figure A-2: NWS WFO Configuration Page

Configuration Item	Remarks
WFO City Name	The official WFO name
State	Dropdown selection box
Postal Street Address	Mailing address street address of the WFO. This information is used in the footer of each WFO AHPS page.
Postal City Name	Mailing address city name of the WFO. This information is used in the footer of each WFO AHPS page.
Zip Code	Mailing address zip code of the WFO. This information is used in the footer of each WFO AHPS page.
Public Phone	Public phone number of WFO.
Webmaster	Webmaster POC information
Observes DST	Flag if the WFO observes daylight savings; 0 = no, 1 = yes, Default = 1
Time Zone	Dropdown selection box to select timezone
Webpage Title	Title of WFO Webpage
META Description	The META element provides <i>metadata</i> such as a document's keywords, description, and author. Any number of META elements may be contained in the head of a document.
Home Link URL	URL of the WFO Homepage or WFO AHPS Page
Ask Questions / Webmaster Address(es)	Email address(es) listed in this section will be linked to in the footer of NWS WFO Home CMS Driven Web pages.

Once changes are made to configuration data, the user will need to click on the button for the section they have modified. This will save the modification to the configuration database.

Navigation Menu "Left Hand Navigation" Page

With the creation of the new modular NWS CMS, the "Left Hand Navigation" Page has been relocated to this new module to promote consistency in the Left Hand Navigation between a WFO's different Web pages. What this means for the field users is that once they enter the link information in this section of the module, it will be common among all of the field offices other Web pages; there will be no need to update other code or other sections of the NWS CMS. This item will work just like it did when it was part of the Climate CMS and will be explained below once again for those users who are new to the interface.



Figure A-3: Navigation Menu Main Page

The Navigation Categories Editor Page allows users to add, update, delete and edit the categories in the blue left navigation bar on all WFO Web pages. Category name and the order that the categories are displayed are all editable items on this page. If a user changes any of the Category information, they must click in order for those changes to take effect. If a user selects they will directed to a Deletion Confirmation Page. If a user selects they will be directed to the Navigation Links Editor Page; See *Figure A-4*.

Navigation Menu "Left Hand Navigation" Page (con't)

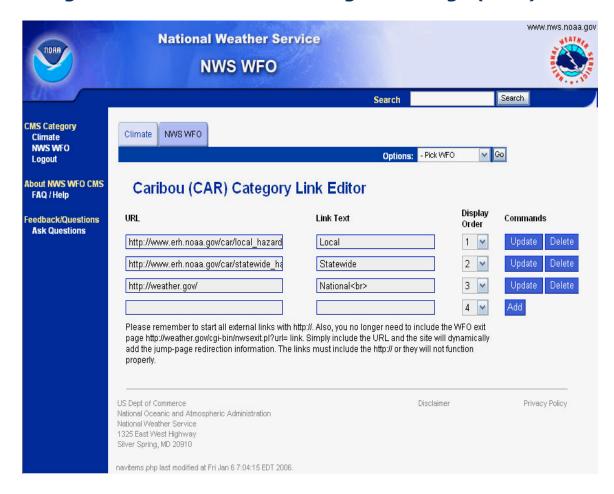


Figure A-4: Links Editor Page

Preferences Page

The Preferences Page *Figure A-5* allows the user to control **Daily Summary** and **Real-time** email notification settings. A **Daily Summary email** includes all NWS WFO CMS changes made for a 24 hour period and is transmitted once every 24 hours. A **Real-time email** includes changes that are made throughout the day and are transmitted as changes are made. The end user will only receive emails if changes have been made to a NWS WFO Web page that they have been associated with in their access configuration.



Figure A-5: Preferences Page

Appendix B - Map Layer(s) Editor

Accessing the New Tools

Once users have logged in and selected their WFO/HSA, they can select either "Map Config" or "Map Layers (XXX)" where XXX is the three-letter ID of the selected WFO/HSA from the "Options" dropdown selection menu. See *Figure 2*.

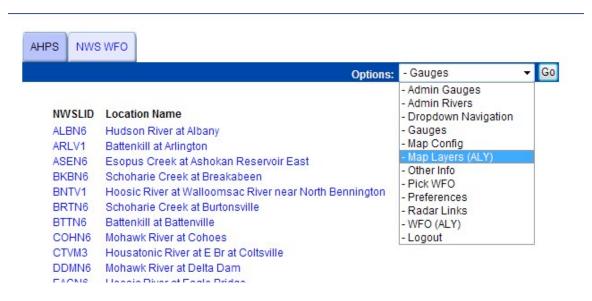


Figure 2: Map Layers Selection "Options" Dropdown

After Map Layers (XXX) has been selected, users will be directed to the HSA Map Layers Edit Page where they can choose the different editable layers within the HSA Map. See *Figure 3*.

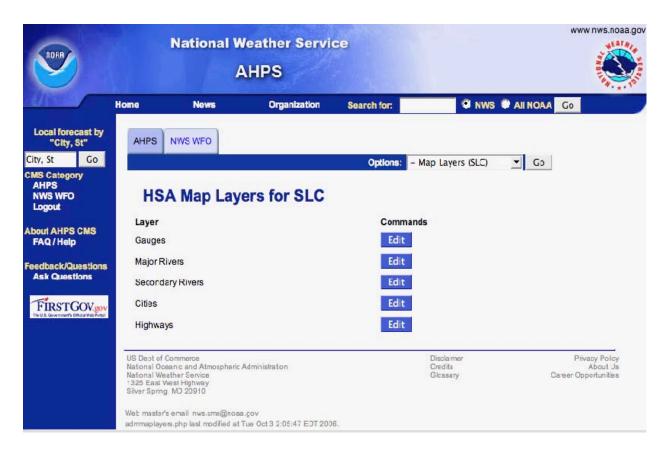


Figure 3: Map Layers Edit Page (SLC)

On the "Map Layers Edit Page" users can select to edit gauge plot and labeling orientation (Gauges), Major River display and labeling orientation (Major Rivers), Secondary River display and labeling orientation (Secondary Rivers), Cities display and labeling orientation (Cities), and finally Highway labeling and designation (State Highway, US Highway, Interstate). Each of these editors and their features will be covered in this document.

Gauges Layer Editor

The first tool this document will cover will be the When users click associated with the Gauges selection they will be taken to a gauge selection page where a gauge can be selected for map layer editing. This page looks very similar to the gauge selection page that used for editing a gauge's configuration. See *Figure 4* below.



Figure 4: Gauge Selection Page-Map Layer Editor

To edit a gauge simply click on a gauge from the provided list. This will redirect users to the HSA map preview page. See *Figure 5* below:

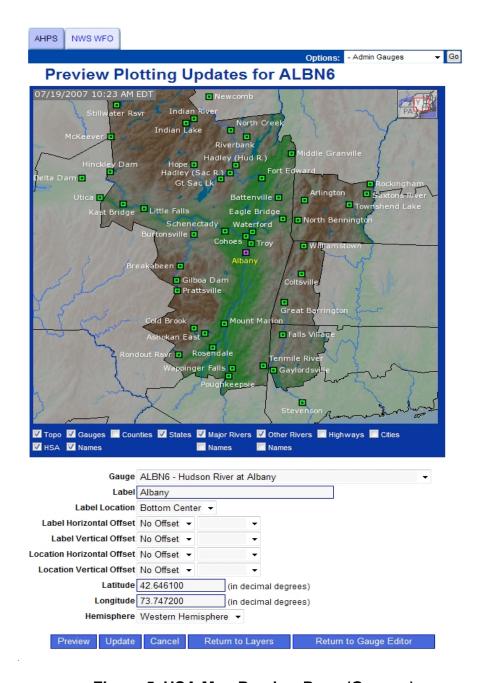


Figure 5: HSA Map Preview Page (Gauges)

Once users arrive on this page they will notice that the gauge that was selected on the previous page will be highlighted in **purple**. Users have the ability to edit the plot location via Latitude and Longitude, Label Name, Label Location in relation to the plot (Top-Center, Bottom-Center, Top Right, etc...) and they have the ability to offset the plot location and label name vertically and horizontally (in pixels) to adjust for plots that may be in close proximity to other items on the map. A description of configurable items can be found on the next page.

Item	Function
Label	Gauge Plot Label Name
Label Location	Label name in relation to plot point

Label Horizontal Offset	Offset in pixels left or right from Label Location
Label Vertical Offset	Offset in pixels up or down from Label Location
Location Horizontal Offset	Offset in pixels left or right from the Lat/Long Coordinates input for gauge plot
Location Vertical Offset	Offset in pixels up or down from the Lat/Long Coordinates input for gauge plot
Latitude (decimal degrees)	Latitude in decimal degrees for gauge plot point
Longitude (decimal degrees)	Longitude in decimal degrees for gauge plot point

A major advantage of this new system is the ability to allow users to make changes to the map layers and preview them before they are published to the Web. Additionally, users can toggle on/off the different layers of the map (see *Figure 6* below) while making their adjustments to see how the data will look when additional layers are added/removed to the map. **This feature is available in ALL layer editors**



Figure 6: Map Layers Toggle

Once changes have been made, users can click

preview to see how their changes will be drawn on the map. If needed, additional changes can be made and previewed before clicking update to publish their changes to their regional web server.

PLEASE NOTE

Changes will not be available for viewing on live AHPS page until early

December. The current scheduled deployment date is December 5th

When a user has completed editing gauge layer items they can return to the HSA Map Layers Edit Page by clicking

Major Rivers and Secondary River Layer(s) Editor

In this release of the AHPS CMS, field offices have the ability to decide whether or not a River, Major and/or Secondary, will be labeled on their HSA map. Also,

the labeling orientation for a River can be changed to clearly designate the water body around other labeled items. Additionally, there is the ability to Add a new label or Delete an existing label. When a label has been selected for deletion, a deletion confirmation page will appear asking users if they are sure they wish to delete the selected item.

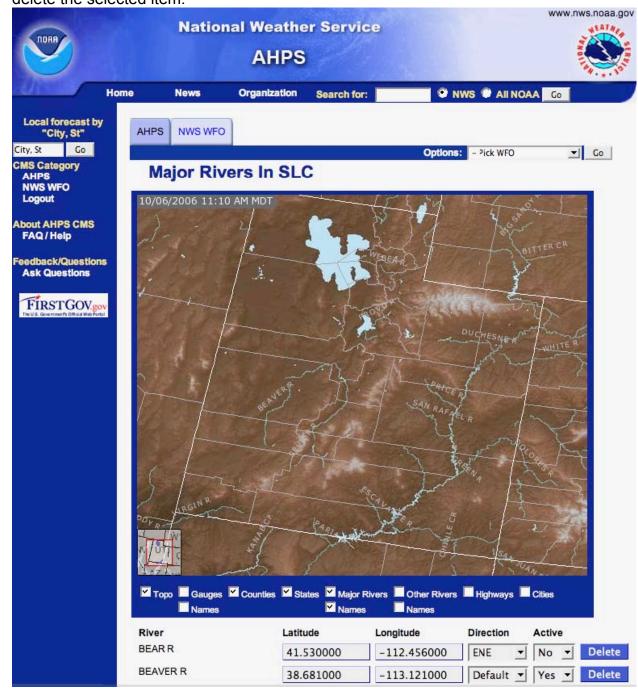
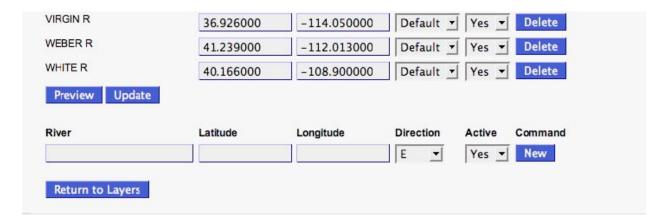


Figure 7A: Major River Layer Editor Page Figure 7B: Major Rivers Layer Add/Preview/Update



To add a new River Label enter the Name, Latitude, Longitude, Direction (direction the label will orientate from the first letter in label name based upon the Lat/Long input).

Also, whether or not the label will be displayed when the Names layer is toggled to "On", Active

= Yes can be configured. When all of this has been input, click

Clicking this button will insert the label name in to the River name list and onto
the Preview Map where it can be further adjusted if needed. After all changes
have been completed on this layer click
another layer to be edited. Once back on this page users can edit the

Secondary Rivers layer by clicking

The Secondary Rivers Layer Editor Page has the exactly the same features/functionality as the Major River Layers editor page except that it has its own set of On/Off toggles. See *Figures 8A and 8B* below.

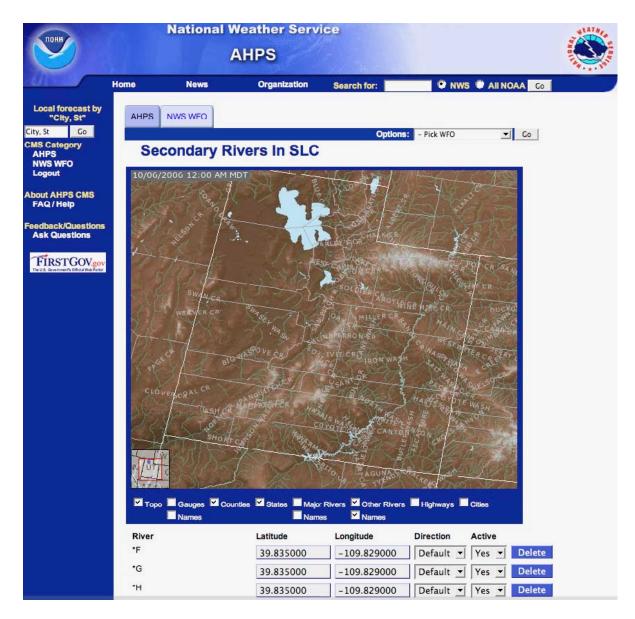


Figure 8A: Secondary Rivers Page

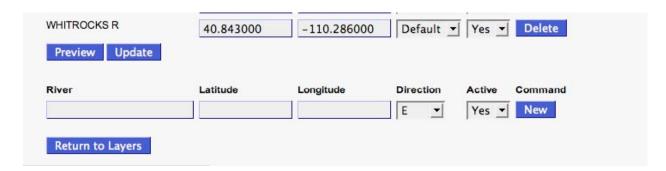


Figure 8B: Secondary Rivers Layer Add/Preview/Update

Cities Layer Editor

On this layer users have the ability to Add/Delete/Edit Cities labeled on their HSA map. This becomes very useful when gauges are plotted near cities of interest. Users also have the ability to manipulate the orientation of the label(s) associated with this layer as well. See *Figure 9*.

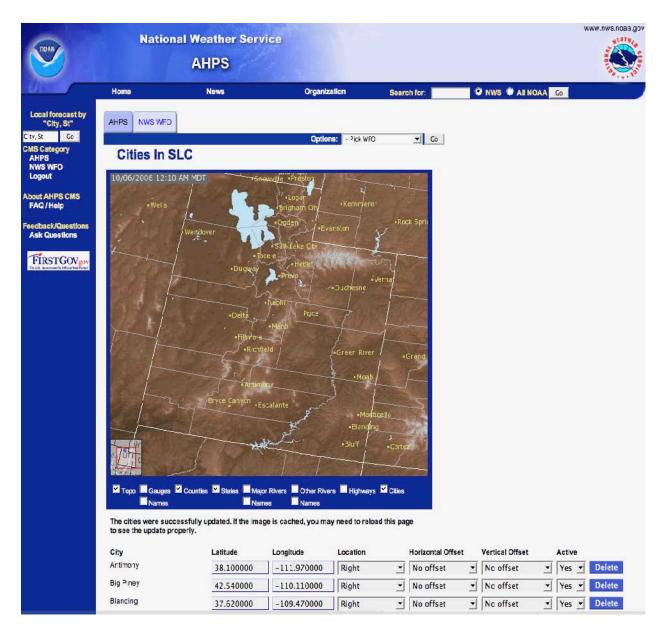


Figure 9A: City Layer Editor Page

Description of Items:

City	Label name (City Name)
Latitude	Latitude in decimal degrees for plot
Longitude	Longitude in decimal degrees for plot
Location (label)	Original orientation of label in relation to
	plot
Horizontal Offset	Offset left or right in relation to original
	label location
Vertical Offset	Offset up or down in relation to original
	label location
Active	Whether or not to display configured plot
	Yes/No

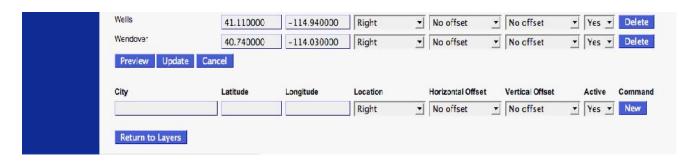


Figure 9B: City Layer Editor Add/Preview/Update

Just as with the other Layer editors, users can add new plots and labels to the selected layer using the tools located to the bottom of the editor page. Once a new plot has been added it can be preview and adjusted accordingly if needed. Once all edits have been completed users can exit this layer editor by selecting

Return to Layers

Highway Layers Editor

The final configurable layer item is the Highways Layer. Users have the ability to label major highways that have been pre-drawn on their HSA maps. The labeling process involves inputting latitude and longitude for a highway marker label and defining what type of marker label goes with the highway being labeled. Several labels have been predefined within the AHPS CMS for the highways, however it may be a WFOs decision to label more of the available highways to provide end users with more detail.

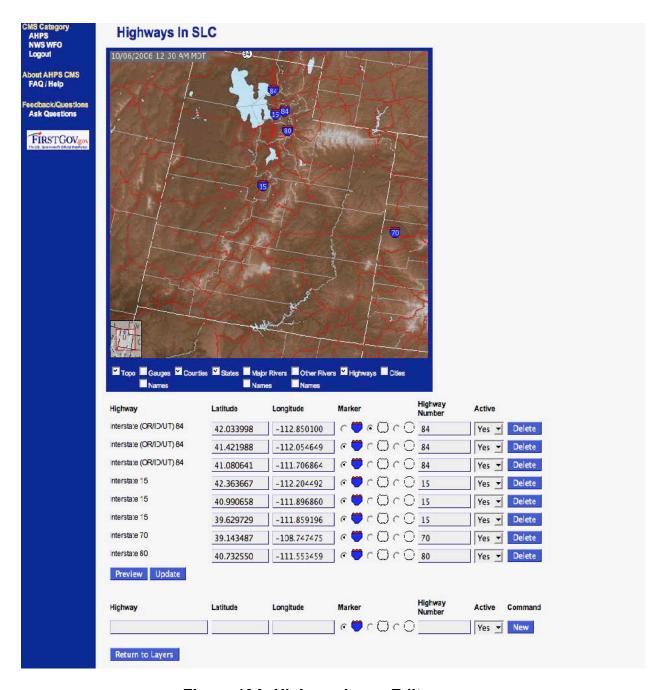


Figure 10A: Highway Layer Editor

Description of Items:

Highway	Name of Highway
Latitude	Latitude in decimal degrees where Marker
	will be plotted
Longitude	Longitude in decimal degrees where
	Marker will be plotted
Marker	Type of marker to be used in plot:
Highway Number	Number / Letter used to label Marker
Active	Whether or not to display the defined
	Marker. Yes/No

To add a highway marker you will fill in the items above using the form located at the bottom of the layer editor page.

Appendix C – Gauge Photo Upload Tool



Guide for AHPS Gauge Photo Tool

Version 1.2





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Background

The AHPS Gauge Photo Upload Tool was designed to allow NWS AHPS users to upload and edit AHPS Gauge Photo Information within a uniform interface for all Regions. This tool eliminates the need to store gauge photos in a directory within the Regional Systems and prevents errant file naming from hindering the display of the images.

The tool can be accessed at: https://collaborate.werh.noaa.gov/ahps/photo_upload/index.php

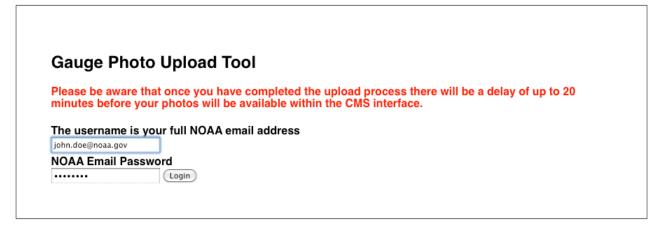


Figure 1: AHPS Gauge Photo Tool Login page



Functionality

Interface

The AHPS Gauge Photo Tool interface requires 5 steps to be completed to ensure a successful upload:

Login
WFO Selection
NWSLI Selection
Image File Browse/Preview
Upload of File
Add/Edit Photo Caption Information (AHPS CMS)

Login

Users will notice within the AHPS CMS that the usual photo management area has been replaced with a link to the new AHPS Photo Management Tool. Users can click the "click here" to be directed to the tool.

(https://collaborate.werh.noaa.gov/ahps/photo_upload/index.php)

Photo

Photos with no caption specified will not display on the hydrograph page. If you would like to upload photos click here.

Figure 2: AHPS CMS Link Area



Once users have clicked the link they will be directed to the server in Eastern Region that hosts the tool. Depending on whether or not users have been to this server/tool before and how their machine handles cookies, users may be prompted with a login as shown in *Figure 3*.

***Please Note: The login to this server should be in the format of firstname.lastname and DOES NOT need to include @noaa.gov. Whereas the Photo Upload Tool login that follows this login requires the full email address format.

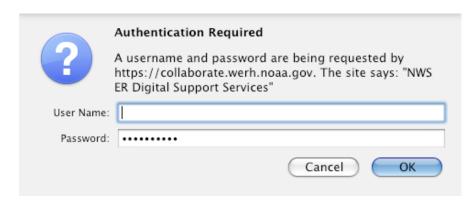
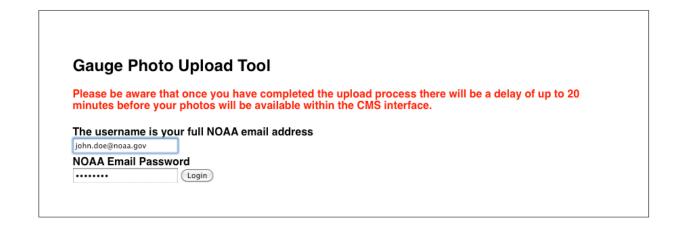


Figure 3: ER Digital Support Services Server Login

The login page of the AHPS Photo Management Tool (seen below). Users will need to login using the same login that they use with the AHPS CMS (**full** NOAA email address eg.. <u>john.doe@noaa.gov</u>).





WFO Selection

After users have logged in they will be directed to a page that will display the username and a dropdown selection menu that will contain the WFO/HSA that the user has access to. Next, the user will need to select the WFO/HSA that the desired sensor is associated with from the menu.

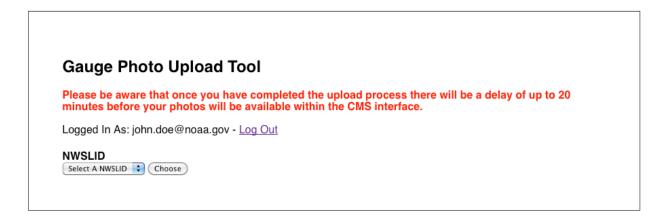


Figure 5: Successful Login Page

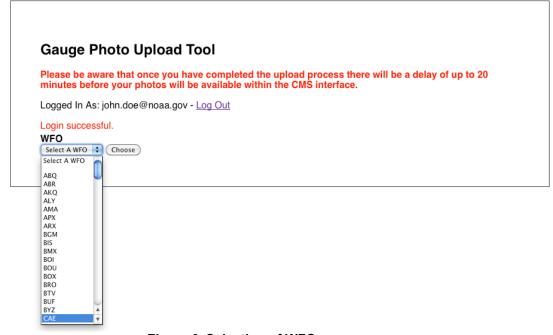


Figure 6: Selection of WFO



NWSLI Selection

After users have selected the desired WFO, they will be taken to another screen that will provide an NWSLI dropdown selection menu. Users will simply click the menu (sorted alphabetically) and choose the site ID that they would like to upload an image for. (See *Figure 7* below.)

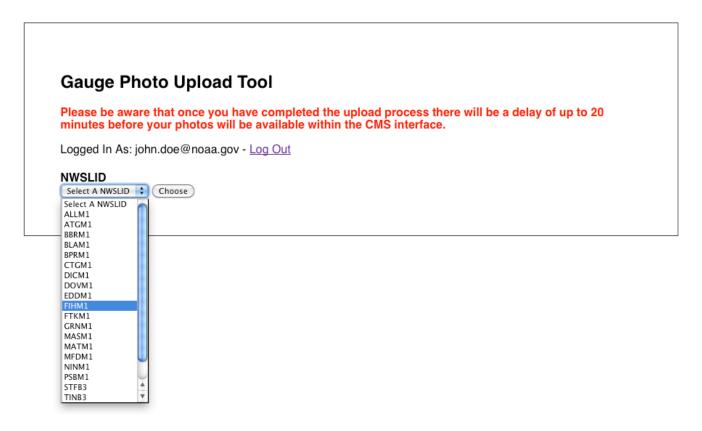


Figure 7: NWSLI Selection



Image File Browse/Preview

After users have successfully located and selected the appropriate NWSLI, the will then be provided with an interface in which to select a local image file. Users will click the Browse... button to bring up the file selection window. After users have selected the desired file users can click Preview to view the file within the interface. A nice feature of the tool is that the file can have any name when it is uploaded into the tool, as the naming feature used to be a big issue when it came to uploading photos.



Figure 8: Image File Browse/Preview Page



Upload of File

Gauge Photo Upload Tool

Please be aware that once you have completed the upload process there will be a delay of up to 20 minutes before your photos will be available within the CMS interface.

Logged In As: john.doe@noaa.gov - Log Out



Figure 9: Sample Photo Selected and Previewed

After users have selected their desired image file and previewed the image to ensure it will display they way they wish, they should click to move the image file to the AHPS servers.



Gauge Photo Upload Tool

Please be aware that once you have completed the upload process there will be a delay of up to 20 minutes before your photos will be available within the CMS interface.

Logged In As: john.doe@noaa.gov - Log Out

The gauge photo was uploaded successfully.

The uploaded gauge photo will be available on the corresponding gauge edit page within 20 minutes. Once available please edit the caption for your photo and it will be presented on the appropriate ahps pages.

Upload another photo for this location.

Upload photos to a new location.

Figure 10: Successful Upload Confirmation Screen

When users have successfully uploaded their desired image they will be directed to a page where they can either upload additional photos for this location, choose to upload images to another location within the area of their responsibility, or simply log out of the tool. After the 20-minute period has passed, please login to the AHPS CMS and navigate to the corresponding "Gauge edit" page and edit the captions of the images so they will display on the hydrograph pages. See below:

Photo

Photos with no caption specified will not display on the hydrograph page. If you would like to upload photos click here.



Figure 11: Caption/Photo Edit Area Gauge Edit Page (AHPS CMS)



Users will simply need to click located out the right of the image thumbnail to access the area where they can add the text for the caption. See below:



Figure 12: Caption Text Edit Area (AHPS CMS)

After the text has been input, users will click to add the caption to the image. User will see a confirmation text appear below the button shown below. To return to the Gauge Edit Page, users will need to click "Back To Gauge" located just above the image. Once this has been completed users will be able to view the images on the hydrograph page, see below.

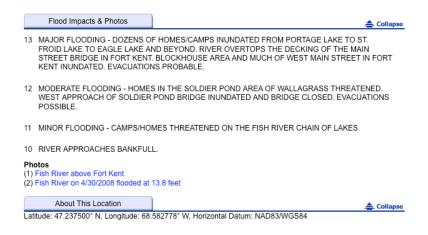


Figure 13: Available Photos on Hydrograph Page

This concludes the photo upload tool document.